



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

HJ

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/820,370	04/07/2004	Joshua D. Spodek	SG-1 DIV CON	7671
1473	7590	07/19/2007	EXAMINER	
FISH & NEAVE IP GROUP ROPS & GRAY LLP 1211 AVENUE OF THE AMERICAS NEW YORK, NY 10036-8704			DAVIS, CASSANDRA HOPE	
ART UNIT		PAPER NUMBER		
3611				
MAIL DATE		DELIVERY MODE		
07/19/2007		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/820,370	SPODEK ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Cassandra Davis	3611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### **Status**

- 1) Responsive to communication(s) filed on 30 April 2007.
- 2a) This action is **FINAL**.                                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### **Disposition of Claims**

- 4) Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 1-15, 19-22, 24 and 25 is/are allowed.
- 6) Claim(s) 16-18 and 23 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### **Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### **Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### **Attachment(s)**

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_.
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 16, 18 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Campbell, British Patent 106,866. Campbell teaches a display device comprising stationary images mounted on a backboard 1, a slit-board 3 spaced in front of and parallel to the backboard, and a moving viewer 6 spaced from the slit-board. As the viewer moves pass the device a virtual picture or image is produced. The image can appear stationary or in motion relatively the observer. Campbell teaches that the virtual picture/image  $P$  is equal to the distance of the observer from the background 1 and the quotient of the actual width of the picture and distance between the background 1 and screen.  $P/p=D/d$ . Page 3, line 8-12. It would have been obvious to one having ordinary skill in the art at the time this invention was made to make the slit width one tenth of the actual image width, since it has been held that discovering an optimum value of a

result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980)

3. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Campbell in view of Ladislas, French Patent 1029300. Ladislas teaches a display device comprising stationary images f mounted on a wall, a slit-board g spaced in front of and parallel to the backboard, and a moving viewer 6 in a train spaced from the slit-board. It would have been obvious to one having ordinary skill in the art at the time this invention was made to construct the display device taught by Campbell along a train track as taught by Ladislas to enhance the view of the passengers on the train.

***Allowable Subject Matter***

4. Claims 1-15, 19-22, 24-25 allowed.

***Information Disclosure Statement***

5. The information disclosure statement (IDS) submitted on 9/27/04 and 4/7/04 was filed before the mailing date of the first office action on 8/12/05. The copy of the French Patent 892874 was received on September 18, 2006. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

***Response to Arguments***

6. Applicant's arguments filed April 30, 2006 have been fully considered but they are not persuasive.

7. With respect to claims 19-22, the applicant points out the claims have been objected to as being dependent from a rejected base claim when in fact these claims have been written in independent form. In response, claims 19-22 are herein indicated as allowable over the prior art of record.

8. Applicants argues that Britain '866 fails to show or suggest restricting the slot-width to be at most one-tenth the image-width in order to project images substantially without blurring, and that France '300 does not make up the deficiency of Britain '866 in failing to show or suggest applicants' invention. The applicant further argues "[t]o the extent that Britain '866 recognizes the relationship of slit width to blurring, Britain '866 teaches away from restricting the slit width as claimed, stating (page 3, lines 34-36) that the width nevertheless "may be made amply wide" to allow daylight to illuminate the picture.

9. The applicant previously argues that the invention as claimed requires that the width of the slits in the slit board be selected to be at most one-tenth of the width of the images in order to project images substantially

without blurring. The applicant points out that British Patent to Campbell specifies that the slots may have a width of 2 inches and the image a width of 15 inches, corresponding to a slot width to image width ratio of approximately 0.133. The 0.133 ratio is greater than the claimed 0.1 ratio. The applicant amended the claims to delete the term "about" so that it reads "said slit width is selected to be at most one-tenth of said actual image width.

In response, Campbell states "each element of the virtual pictures moves relatively to the observer a distance slightly greater than the width of the slot; and vertical element of the picture are correspondingly blurred. This effect is kept within unobjectionable limits by using bold lines and by suitably restricting the width of the slots. Campbell recognized the slot width affected how blurred the image of the picture. Although Campbell suggest a slot width of 2 inches and a picture width of 15 inches for a 1.33 ratio. The examiner contend it is within the a person skilled the art upon further evaluation of the device determine the optimum ratio for minimizing the blurriness of the image of the picture. Therefore, the examiner maintains it would have been obvious to one having ordinary skill in the art at the time this invention was made to make the slit width one tenth of the

actual image width, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

The rejection is maintained.

### ***Conclusion***

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cassandra Davis whose telephone

number is 571-272-6642. The examiner can normally be reached on Monday-Friday 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lesley Morris can be reached on 571-272-6651. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Cassandra Davis  
Primary Examiner  
Art Unit 3611

CD  
July 8, 2007